Appl. No. 09/880,734 Amdt. dated February 28, 2005 Reply to Office Action of October 27, 2004

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

1. (Original) A method of operating a programmable logic integrated circuit comprising:

loading an initial value in a count register of a watchdog timer circuit of the programmable logic integrated circuit;

clocking the count register to advance the count register to a next value with each clock;

periodically reloading the count register with the initial value;

when the stored count value held in the count register of the watchdog timer circuit reaches a final value, asserting a triggered signal output; and

upon receiving the triggered signal output in a reset logic block of the programmable logic integrated circuit, causing reloading of configuration data from an external source into the programmable logic integrated circuit.

- 2. (Original) The method of claim 1 wherein the external source is a nonvolatile memory.
- 3. (Original) The method of claim 1 wherein the external source is a serial EPROM.
- 4. (Original) The method of claim 1 wherein the final value causes an overflow condition for the count register of the watchdog timer circuit.
- 5. (Original) The method of claim 1 wherein the watchdog timer circuit increments the stored count value at each clock pulse.
- 6. (Original) The method of claim 1 wherein the watchdog timer circuit decrements the stored count value at each clock pulse.

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7. (Original) The method of claim 1 wherein periodically reloading the count register comprises:

writing a magic value into a reload register of the watchdog timer circuit; and when the magic value is received in the reload register, resetting the count register of the watchdog timer circuit to the initial value.

8. (Original) The method of claim 1 wherein periodically reloading the count register comprises:

writing a first magic value into a reload register of the watchdog timer circuit; when the first magic value is received in the reload register, reloading the count register of the watchdog timer circuit to the initial value; and

after the first magic value is received in the reload register, permitting a subsequent reload of the count register when a second magic value is written into reload register.

- 9. (Original) The method of claim 8 further comprising:
  continually reloading the count register to the initial value by writing the first and second magic values to the reload register in sequence, alternately.
- 10. (Original) The method of claim 1 further comprising:
  using the configuration data to configure an embedded processor portion and a
  programmable logic portion of the programmable logic integrated circuit.
- 11. (Original) The method of claim 1 wherein to avoid asserting the triggered signal output, a periodic reload of the watchdog timer circuit should be performed during a time period it takes the watchdog timer circuit to count from the initial value to the final value.
- 12. (Original) The method of claim 11 wherein the period is less than about two minutes.
- 13. (Original) The method of claim 11 wherein the time period depends on clock frequency used to clock the watchdog timer circuit.

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- 14. (Original) The method of claim 1 wherein the initial value is 0 and the final value is a maximum count value permitted by the count register.
- 15. (Original) The method of claim 1 wherein the count register comprises 32 bits.
  - 16. 43. (Canceled).
- 44. (Currently Amended) A method of operating a programmable logic integrated circuit comprising:

clocking a watchdog timer circuit of the programmable logic integrated circuit to advance a count register of the watchdog timer circuit;

loading a first magic value into a reload register of the watchdog timer circuit, which resets the count register to an initial value;

after loading the first magic value, loading a second magic value into the reload register, which causes the count register to reset the initial value; [[and]]

after loading the first magic value into the reload register, loading a value other than the second magic value into the reload register, which causes the watchdog timer circuit to generate a triggered signal; and

receiving the triggered signal in a reset logic block of the programmable logic integrated circuit, which causes a reloading of configuration data from an external source into the integrated circuit.

- 45. (Canceled)
- 46. (Currently Amended) The method of claim [[45]] <u>44</u> wherein the configuration data is used to configure an embedded processor portion and a programmable logic portion of the programmable logic integrated circuit.
- 47. (Currently Amended) The method of claim [[45]] <u>44</u> wherein the watchdog timer circuit is located in an embedded processor portion and the reset logic block is located in a programmable logic portion of the <u>programmable logic</u> integrated circuit.

48. (Original) The method of claim 44 further comprising:

allowing the count register of the watchdog timer to advance to a final value before the first or second magic values are loaded, which causes the watchdog timer circuit to generate the triggered signal.

- 49. (Original) The method of claim 44 wherein the initial value is 0.
- 50. (Original) The method of claim 44 wherein the initial value is a value other than 0.
- 51. (Original) The method of claim 44 wherein the first magic value is different from the second magic value.
- 52. (Original) The method of claim 48 wherein the final value is user-selectable.
- 53. (Original) The method of claim 48 wherein the final value is the maximum count permitted by the count register.
- 54. (Original) The method of claim 44 wherein in a debug mode, the count register does not advance.